

REMARKS

Claims 23, 25-32, and 36-43 are presently pending. The subject matter of Claim 35 is incorporated into Claim 23. Support for new Claim 43 is found in the Specification as filed, for example at page 8, in Table 2. The following addresses the substance of the Office Action.

Obviousness

Pires in view of Proceedings of World Conference on Lauric oils NPL as evidenced by Doucet

Claims 23, 25-26, 28, 30-32, 37-38 and 41 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pires (U.S. Application Publication No. 2002/0119238) in view of the Proceedings of World Conference on Lauric oils NPL (Thomas H. Applewhite) as evidenced by Doucet (U.S. Patent No. 5,908,655). Pires teaches a creamy, milk-free and protein-free oil in water emulsion comprising hydrocolloids and emulsifier. However, Pires et al. does not teach a hydrogenated fat. Applewhite teaches the use of hydrogenated palm kernel oils for the formation of biscuit creams and bakery coatings and glazes. Doucet et al. allegedly teaches that fully hydrogenated palm kernel oil can have trans fatty acid content of less than 1%.

The Applicant agrees that Pires teaches protein-free emulsion made of PKO (palm kernel oil), and that Pires fails to teach a hydrogenated fat with a reduced trans fat content, in particular with a trans fat content of less than 2%. The Applicant agrees also that Applewhite teaches that hydrogenated PKO can be used in the formation of whipped topping products. However, like Pires, Applewhite fails to teach a hydrogenated fat with a reduced trans fat content, in particular with a trans fat content of less than 2%.

With regard to Doucet, the Applicant does not agree with the Examiner's conclusion that the reference teaches that fully hydrogenated palm kernel oils have trans fatty acid contents of typically less than 1%. The passage quoted by the Examiner (Col. 9, lines 21-25) was taken out of context. Contrary to the Examiner's understanding, the Doucet reference is not related to hydrogenated PKO, and certainly not to hydrogenated PKO having a reduced trans fat content. The reference merely states that natural fats such as coconut oil, palm oil palm kernel oil have a content of mainly natural cis isomers with only minor levels of trans isomers of unsaturated fatty acids (typically less than 1%). The Applicant would like to point out that, Doucet acknowledges at Col. 2, lines 22-23 that typical shortenings employed in bakery products may contain 15-25% trans isomers. In addition, Nalur (U.S. Patent No. 5,932,275), also cited by the Examiner,

describes at Col. 2, lines 22-27 a hydrogenated PKO with a trans fat content of at least 25%, which is to be used as cocoa butter substitute. In other words, hydrogenated PKO can have a trans fat content of at least 25%. Such trans fatty acids are by-products of hydrogenation processes, wherein trans isomers may be introduced at formerly unsaturated positions or naturally occurring cis isomers may be converted to trans isomers.

Referring to Doucet at Column 4, lines 17-19 and 50-61, and Column 9, lines 25-40, the shortening of Doucet avoids introducing trans fats by blending mono- and diglycerides with vegetable oil, thereby producing a shortening without significantly or substantially increasing the amount of trans isomers present from those naturally present. The shortening of Doucet avoids the use of partially hydrogenated fat, restricting such levels to typically less than 25%. Doucet refers to the reaction for producing such blends as “conserved”. In contrast, the presently claimed emulsion comprises 20-30% of a fully hydrogenated fat of lauric acid, which contains less than 2% of trans fatty acids.

Referring to the Abstract of Doucet et al., the reference discloses “The incorporation of the mono and diglyceride fraction into non-hydrogenated oils...”. At Col. 1, lines 9-13, and Col. 4, lines 3-5, Doucet et al. discloses “...an admixture of at least one non-hydrogenated vegetable oil and at least one stearine fraction...”. At Col. 4, lines 37-41, Doucet states “The stearine fraction or the at least one monoglyceride and/or diglyceride can be derived from natural food grade fats, preferably plant fats, such as coconut oil, palm oil, palm kernel oil, and the like, or fats that have been fully hydrogenated. Thus, in certain embodiments, the stearine fraction or the at least one monoglycerides and/or diglycerides is derived from naturally saturated fats or oils”. This paragraph makes clear that the stearine fraction is meant to be prepared either from natural PKO, or from other fats that have been fully hydrogenated. Therefore, it cannot be inferred from these different passages that Doucet meant to refer to fully hydrogenated PKO.

What Doucet describes is a shortening composition with soybean oil mainly and mono- and diglycerides (possibly prepared from palm oil), wherein the fatty acids profile is such that the saturated fatty acids content is less than 25% (see Col. 9, lines 36-41; and Example 1). Referring to Col. 4, lines 50-61, the proportion of the stearine fraction or the at least one monoglycerides and/or diglycerides is between 3-15%. This is in contrast to the presently claimed non-dairy vegetable oil-in-water emulsion comprising 20-30% of fully hydrogenated fat of lauric origin.

Moreover, in the presently claimed emulsions, the type of fat is specifically chosen to have a fatty acid profile that is mainly lauric acid (i.e., C12:0 is the most commonly occurring fatty acid). Referring to paragraph [0027] of the specification as filed, the inventors have discovered that such fats that are composed mainly of lauric acid are characterized by a trans fatty acid content of less than 2%. A preferred fatty acid profile is presented in Table 2 of the Specification as filed, wherein the fat comprises free fatty acids in amounts of 2-5% caprylic acid, 3-5% caprinic acid, 44-51% lauric acid, 15-17% myristic acid, 7-10% palmitic acid and 23-29% stearic acid, said fat having a trans fatty acids content of less than 2%.

To further emphasize the difference between the presently claimed emulsions and the prior art, Claim 23 is amended to recite that the non-dairy vegetable oil-in-water emulsion comprises 20% to 30% fully hydrogenated fat, wherein said fat is mainly of lauric origin and contains less than 2% of trans fatty acids. New Claim 43 further specifies that the amount of fat of lauric acid is between 44-51% of the total free fatty acids and Claim 39 specifies that the fat comprises free fatty acids in amounts of 2-5% caprylic acid, 3-5% caprinic acid, 44-51% lauric acid, 15-17% myristic acid, 7-10% palmitic acid and 23-29% stearic acid, as supported in Table 2 of the Specification as filed.

In conclusion, the combination of references cited by Examiner, would not have led one of ordinary skill in the art to develop the presently claimed emulsions comprising a fully hydrogenated fat, wherein said fat is mainly of lauric origin and contains less than 2% of trans fatty acids. Accordingly, there was no incentive at the time of filing of the present application for the skilled person to prepare the presently claimed non-dairy vegetable oil-in-water emulsions.

In view of the amendments to the claims the preceding remarks, the Applicants respectfully request that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Other Rejections under 35 U.S.C. § 103(a)

Claims 35, 27, 29, 39, 40 and 42 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Pires (*supra*) in view a number of other references including of Applewhite (*supra*), Doucet (*supra*) and King (U.S. Patent No. 4,876,107), Leshik (U.S. Patent No. 6,117,473), Moussa (U.S. Patent No. 6,833,231), Freeman (U.S. Application Publication No. 2003/0026890), Nalur (U.S. Patent No. 5,932,275) and Desai (U.S. Patent No. 6,638,556).

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Since Claims 35, 27, 29, 39, 40 and 42 are ultimately dependent on Claim 23, they are also not obvious in light of the remarks above. As such, the Applicants respectfully request that the rejections be withdrawn.

Information Disclosure Statement

Applicant is submitting an IDS together with this Amendment. In the IDS, it is noted that the European counterpart patent to the present application, which has claims similar to the claims as amended herein, is the subject of an opposition which was filed in September 2009. The opposer in Europe has relied upon the references being submitted in the IDS (U.S. Patent No. 4,770,892 and DE 10064061) in arguing that the granted European claims are not patentable. DE 10064061 is the priority application claimed in the Pires reference discussed above (i.e., U.S. Application Publication No. 2002/0119238). Although Applicant is making the references cited in the European opposition of record in this application, Applicant is not currently providing a copy of the Opponents written submission as it is in the German language and no English translation is currently available. Applicant wishes to make the Examiner aware of the opposition and will gladly provide copies of the written submissions should the Examiner request them.

No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

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CONCLUSION

In view of Applicants' amendments to the Claims and the foregoing Remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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